

**UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF TEXAS
HOUSTON DIVISION**

IN RE ALTA MESA RESOURCES, INC.
SECURITIES LITIGATION

Case No. 4:19-cv-00957

Judge George C. Hanks, Jr.

**APPENDIX TO DEFENDANTS' REPLY IN SUPPORT OF
MOTION TO EXCLUDE CLASS PLAINTIFFS' EXPERT
WITNESS PROFESSOR ADAM BADAWI**

In accordance with Court Procedure 7(B)(3), Moving Defendants submit this Appendix in support of their Reply in Support of Motion to Exclude Class Plaintiffs' Expert Witness Professor Adam Badawi, which is filed concurrently herewith. Moving Defendants rely on the following evidence to support their motion:

Ex. No.	Description
14	Excerpts of the Deposition of Jeffrey Knupp dated June 14, 2023

Dated: February 2, 2024

Respectfully submitted,

By /s/ J. Christian Word

J. Christian Word
Attorney-in-Charge for Defendants
D.C. Bar No. 461346
S.D. Tex. Bar No. 3398485
LATHAM & WATKINS LLP
555 Eleventh Street, NW
Suite 1000
Washington DC 20004
Tel.: (202) 637-2200
Fax: (202) 637-2201

Of counsel:
Heather A. Waller
IL Bar No. 6302537
S.D. Tex. Bar No. 2886108
LATHAM & WATKINS LLP
330 North Wabash Avenue
Suite 2800
Chicago, IL 60611
Tel: (312) 876-7700
Fax: (312) 993-9767
Heather.Waller@lw.com

Laura E. Bladow (*pro hac vice*)
D.C. Bar No. 1740343
Eunice M. Kabuga (*pro hac vice*)
D.C. Bar No. 90006573
LATHAM & WATKINS LLP
555 Eleventh Street, NW
Suite 1000
Washington DC 20004
Tel.: (202) 637-2200
Fax: (202) 637-2201
Laura.Bladow@lw.com
Eunice.Kabuga@lw.com

Counsel for Defendants Alta Mesa Resources, Inc., f/k/a Silver Run Acquisition Corporation II; Riverstone Holdings LLC; Harlan H. Chappelle; Stephen S. Coats; Michael E. Ellis; William D. Gutermuth; James T. Hackett; Pierre F. Lapeyre, Jr.; David M. Leuschen; Donald R. Sinclair; Ronald J. Smith; Jeffrey H. Tepper; Thomas J. Walker; and Diana J. Walters

Walter M. Berger
TX Bar No. 00798063
Attorney-in-Charge
WINSTON & STRAWN LLP
800 Capitol Street, Suite 2400
Houston, TX 77002-2925
Tel: (713) 615-2699
Fax: (713) 651-2700
cberger@winston.com

Of Counsel:
Katherine A. Preston
TX Bar No. 24088255
WINSTON & STRAWN LLP
800 Capitol Street, Suite 2400
Houston, TX 77002-2925
Tel: (713) 615-2699
Fax: (713) 651-2700
kpreston@winston.com

John E. Schreiber (*pro hac vice*)
CA Bar No. 261558
WINSTON & STRAWN LLP
333 S. Grand Ave., 38th Floor
Los Angeles, CA 90071
Tel: (213) 615-1700
Fax: (213) 615-1750
jschreiber@winston.com

Co-Counsel for Defendants Harlan H. Chappelle and Michael E. Ellis

CERTIFICATE OF SERVICE

I certify that a true and correct copy of the foregoing document was filed with the Clerk of Court using the CM/ECF system, which will send electronic notification of such filing to all counsel of record.

/s/ J. Christian Word

J. Christian Word

EXHIBIT 14

IN THE UNITED STATES DISTRICT COURT
FOR THE SOUTHERN DISTRICT OF TEXAS
HOUSTON DIVISION

IN RE: ALTA MESA §
RESOURCES, INC. § CASE NO. 4:19-cv-00957
SECURITIES LITIGATION §

VIDEOTAPED / REALTIMED DEPOSITION OF
JEFFREY P. KNUPP
JUNE 14, 2023

(PRESENTED AS 30(B)(6) CORPORATE REPRESENTATIVE
OF TUDOR PICKERING, HOLT & CO.)

<p style="text-align: right;">Page 2</p> <p>1 VIDEOTAPED / REALTIMED DEPOSITION OF JEFFREY P. 2 KNUPP, produced as a witness at the instance of the 3 Defendants Alta Mesa Resources, and duly sworn, was 4 taken in the above styled and numbered cause on 5 Wednesday, the 14th day of June, 2023, from 9:37 a.m. to 6 5:03 p.m., before Pat English-Arredondo, CSR, RMR, CRR, 7 CLR, in and for the State of Texas, reported by 8 computerized stenotype machine in Remote Counsel 9 realtime, via Zoom, pursuant to the Federal Rules of 10 Civil Procedure and any provisions stated on the record 11 herein. 12 13 14 15 16 17 18 19 20 21 22 23 24 25</p>	<p style="text-align: right;">Page 4</p> <p>1 A P P E A R A N C E S 2 (Continued) 3 COUNSEL FOR DEFENDANTS, ARM ENERGY HOLDINGS LLC: 4 Mr. Dane Sowers (via Zoom / Realtime) 5 EVERSHEDS SUTHERLAND (US) LLP 6 One American Center 7 600 Congress Avenue, Suite 2000 8 Austin, Texas 78701 9 Phone: 512.721.2664 10 DaneSowers@eversheds-sutherland.com 11 - and - 12 Ms. Tanvi Shah (via Zoom / as noted) 13 EVERSHEDS SUTHERLAND (US) LLP 14 700 Sixth Street, NW, Suite 700 15 Washington, DC 20001 16 Phone: 202.383.0100 17 tanvishah@eversheds-sutherland.com 18 19 COUNSEL FOR DEFENDANTS ALTA MESA RESOURCES, INC., HARLAN 20 H. CHAPPELLE, JAMES T. HACKETT, THOMAS J. WALKER, 21 WILLIAM D. GUTERMUTH, JEFFREY H. TEPPER, DIANA J. 22 WALTERS, RIVERSTONE INVESTMENT GROUP LLC, STEPHEN COATS, 23 MICHAEL E. ELLIS, PIERRE F. LAPEYRE, DAVID M. LEUSCHEN, 24 DONALD SINCLAIR, RONALD SMITH: 25 Mr. Matthew Peters (via Realtime) Mr. Jansen Mackenzie Vandermeulen LATHAM & WATKINS LLP 555 Eleventh Street, NW, Suite 1000 Washington, DC 20004 Phone: 202.637.2200 Matthew.peters@lw.com Jansen.vandermeulen@lw.com - and - Mr. Arthur F. Foerster (Via Remote) LATHAM & WATKINS LLP 330 North Wabash Avenue, Suite 2800 Chicago, Illinois 60611 Phone: 312.876.7700 Arthur.foerster@lw.com</p>
<p style="text-align: right;">Page 3</p> <p>1 A P P E A R A N C E S 2 COUNSEL FOR TUDOR PICKERING, HOLT & CO. and JEFF KNUPP: 3 Mr. Christopher D. Belelieu 4 GIBSON DUNN & CRUTCHER, LLP 5 200 Park Avenue 6 New York, New York 10166 7 Phone: 212.351.4000 8 cbelelieu@gibsondunn.com 9 10 COUNSEL FOR CLASS PLAINTIFFS: 11 Mr. John M. "Jack" Kelley (via Zoom / Realtime) 12 ROBBINS GELLER RUDMAN & DOWD LLP 13 655 West Broadway 14 San Diego, California 92101 15 Phone: 619.231.1058 16 Jkelley@rgrdlaw.com 17 18 COUNSEL FOR PLAINTIFFS, ALYESKA AND ORBIS: 19 Mr. Joseph Sparacio (via Zoom / Realtime) 20 ROLNICK KRAMER SADIGHI LLP 21 1251 Avenue of the Americas, 41st Floor 22 New York, New York 10020 23 Phone: 212.597.2800 24 Jsparacio@rksllp.com 25 26 COUNSEL FOR DEFENDANTS BAYOU CITY ENERGY AND 27 WILLIAM MCMULLEN: 28 Mr. Kenneth Young (Via Zoom / as noted) 29 Ms. Sydney Corry (Via Zoom / Realtime) 30 KIRKLAND & ELLIS LLP 31 609 Main Street 32 Houston, Texas 77002 33 Phone: 713.836.3761 34 Sydney.corry@kirkland.com 35 Kenneth.young@kirkland.com 36 37 COUNSEL FOR DEFENDANTS, HAL CHAPPELLE AND MICHAEL ELLIS: 38 Ms. Katy Preston (via Zoom / Realtime) 39 WINSTON & STRAWN LLP 40 333 S. Grand Avenue 41 Los Angeles, California 90071 42 Phone: 213.615.1778 43 Kpreston@winston.com</p>	<p style="text-align: right;">Page 5</p> <p>1 A P P E A R A N C E S 2 (Continued) 3 COUNSEL FOR DEFENDANTS HPS INVESTMENT PARTNERS LLC and 4 DON DIMITRIEVICH: 5 Ms. Emily Couture (via Zoom / Realtime) 6 QUINN EMANUEL URQUHART & SULLIVAN LLP 7 51 Madison Avenue, 22nd Floor 8 New York, New York 10010 9 Phone: 212.849.7000 10 Emilycouture@quinnemanuel.com 11 12 THE VIDEOGRAPHER: 13 Mr. Christopher Dolan, 14 Veritext Legal Solutions 15 16 VERITEXT CONCIERGE: 17 Ms. Alexa Pastor (Remote) 18 Veritext Legal Solutions 19 20 CERTIFIED REALTIME / STENOGRAPHIC COURT REPORTER: 21 Ms. Pat English-Arredondo, CSR, RMR, CRR, CLR 22 Veritext Legal Solutions 23 24 25</p>

<p style="text-align: right;">Page 70</p> <p>1 A. When looking at oil, at only oil produced, the</p> <p>2 Amberjack 2.0 has the lowest oil value.</p> <p>3 Q. And looking at the row again, the highest type</p> <p>4 curve when you look at oil is the Amberjack 2.5. Is</p> <p>5 that correct?</p> <p>6 A. That's correct.</p> <p>7 Q. So the TPH type curve came in higher than the</p> <p>8 Amberjack 2.0 type curve. Is that fair?</p> <p>9 A. Sorry. Say that again.</p> <p>10 Q. The TPH type curve, when you look at oil, came</p> <p>11 in higher than the Amberjack 2.0 type curve?</p> <p>12 A. That's correct.</p> <p>13 Q. And if you look at the chart labeled</p> <p>14 "Generation 2.5 Type Well Fit" -- do you see that?</p> <p>15 A. Yes.</p> <p>16 Q. Looking at from zero to six months, it looks</p> <p>17 like there's only a yellow line. Is that correct?</p> <p>18 A. No, that's not correct. The yellow</p> <p>19 line -- there is a yellow and a black line for that time</p> <p>20 period. The yellow line is on top of the black line, so</p> <p>21 it was hard to see the black line.</p> <p>22 Q. So the type curve for the AM2.5 -- I guess</p> <p>23 that would be the Amberjack 2.5 type curve and the TPH</p> <p>24 2.5 type curve overlap up into roughly six months?</p> <p>25 A. They are very close to overlapping, yes.</p>	<p style="text-align: right;">Page 72</p> <p>1 and Osage Thin. Do you recall that?</p> <p>2 A. Yes, I do.</p> <p>3 Q. So does this Slide 12 that we're discussing</p> <p>4 mean that in actuality there's this -- TPH created even</p> <p>5 more type curves than what's possibly reflected on here?</p> <p>6 They created an Oswego Thin, for lack of a better word?</p> <p>7 MR. SPARACIO: Object to form.</p> <p>8 A. And --</p> <p>9 (Simultaneous speaking.)</p> <p>10 Q. (By Mr. Peters) Osage Thin, sorry --</p> <p>11 A. Thank you.</p> <p>12 Q. -- for lack of a better word?</p> <p>13 A. I believe that is correct.</p> <p>14 Q. Okay. And turning to Slide 12, the -- we</p> <p>15 previously discussed that the total EUR MBOE reflects</p> <p>16 the oil type curve for the -- for wells. Is that</p> <p>17 correct here as well?</p> <p>18 A. That is correct.</p> <p>19 Q. And so TPH's type curve for the Meramec zone</p> <p>20 was 641 MBOE?</p> <p>21 A. No. 641 is Amberjack's type curve for the</p> <p>22 Meramec zone.</p> <p>23 Q. Oh, sorry. Okay. Oh, I think that's actually</p> <p>24 total --</p> <p>25 A. Yeah.</p>
<p style="text-align: right;">Page 71</p> <p>1 Q. And the type curves we've been discussing on</p> <p>2 this slide, they are specific to the Osage zone. Is</p> <p>3 that correct?</p> <p>4 A. That's correct.</p> <p>5 Q. If you could turn the slide, please.</p> <p>6 A. (Complying.)</p> <p>7 Q. Does this Slide 12 reflect that TPH created</p> <p>8 type curves specific to the Meramec zone in connection</p> <p>9 with the business combination?</p> <p>10 A. Yes.</p> <p>11 Q. And if you could explain for me here, what is</p> <p>12 the meaning of TPH with less than 300?</p> <p>13 A. Yeah. So we created two separate type curves</p> <p>14 for the Meramec to reflect predicted performance based</p> <p>15 on reservoir thickness. So the less than 300 feet is in</p> <p>16 reference to the thickness of the Meramec zone in a</p> <p>17 specific area.</p> <p>18 So the TPH less than 300 feet would be</p> <p>19 our representation or our prediction of how a well would</p> <p>20 perform that was in the thinner part of the reservoir.</p> <p>21 And then the other one, TPH less than 350</p> <p>22 feet, is our representation of how a Meramec well would</p> <p>23 perform in the thicker part of the reservoir.</p> <p>24 Q. And we previously, on Slide 9, looked at a map</p> <p>25 of AMH's acreage that had the Osage, Meramec, Oswego,</p>	<p style="text-align: right;">Page 73</p> <p>1 Q. -- so apologies.</p> <p>2 So the -- was Amberjack type curve for</p> <p>3 the Meramec 290 EUR MBO?</p> <p>4 A. Yes, that's correct.</p> <p>5 Q. And TPH's -- the type curves that TPH</p> <p>6 developed for the Meramec came in both higher and lower</p> <p>7 than that Amberjack type curve for the Meramec. Is that</p> <p>8 correct?</p> <p>9 A. One of the curves is lower. One of the curves</p> <p>10 is higher.</p> <p>11 MR. PETERS: Why don't we take a short</p> <p>12 break and go off the record.</p> <p>13 THE VIDEOGRAPHER: All parties in</p> <p>14 agreement with going off the record?</p> <p>15 We are going off the record at 11:09 a.m.</p> <p>16 (Recess taken at 11:09 a.m., resuming at</p> <p>17 11:28 a.m.)</p> <p>18 THE VIDEOGRAPHER: We are going back on</p> <p>19 the record at 10:28 a.m. [sic].</p> <p>20 THE REPORTER: 11:28.</p> <p>21 THE VIDEOGRAPHER: 11:28. Sorry.</p> <p>22 Q. (By Mr. Peters) Mr. Knupp, welcome back.</p> <p>23 A. Thank you.</p> <p>24 Q. I believe we were reviewing the April 25th TPH</p> <p>25 presentation. If you could turn to Slide 13, please.</p>

<p style="text-align: right;">Page 74</p> <p>1 A. Okay.</p> <p>2 Q. Does this slide reflect that TPH developed a</p> <p>3 type curve for the Oswego zone in connection with the</p> <p>4 due diligence for the business combination?</p> <p>5 A. Yes.</p> <p>6 Q. And is that type curve, the data for that type</p> <p>7 curve, reflected under the column TPH on this slide?</p> <p>8 A. Yes, it is.</p> <p>9 Q. And in this instance was TPH projecting more</p> <p>10 oil could be recovered from the Oswego zone than the</p> <p>11 sellers were projecting?</p> <p>12 A. That appears to be correct.</p> <p>13 Q. Could you turn to Slide 14, please?</p> <p>14 A. (Reviewing.)</p> <p>15 Q. Does this slide reflect the type curves that</p> <p>16 TPH created for AMH wells for each of the geological</p> <p>17 zones in the AMH STACK acreage?</p> <p>18 A. Yes. This page looks at the input assumptions</p> <p>19 for the type curves that TPH created as well as listing</p> <p>20 the comparable input assumptions that the seller had</p> <p>21 used.</p> <p>22 Q. And the assumptions that TPH used were not</p> <p>23 always identical to the assumptions that the seller</p> <p>24 used. Correct?</p> <p>25 A. That's correct.</p>	<p style="text-align: right;">Page 76</p> <p>1 curve, not inputs to the type curve. It's a mix.</p> <p>2 Q. And which ones are outputs for the type curve?</p> <p>3 A. Just going in order (as read): "EUR, Gross</p> <p>4 Wellhead" is an output. "Oil EUR" is an output.</p> <p>5 "Wellhead Gas EUR" is an output. "% Oil" is an output.</p> <p>6 "EUR, Gross Sales" is an output.</p> <p>7 "GOR, Initial" is an input. "GOR, To</p> <p>8 Life," is an input, and "NGL Yield" is an input.</p> <p>9 Q. So the outputs that you just read for each of</p> <p>10 these TPH type curves shown on this, these values</p> <p>11 reflect the output of TPH's calculations for that type</p> <p>12 curve?</p> <p>13 A. Yes, that's correct.</p> <p>14 Q. And I won't hazard a guess for this one.</p> <p>15 Looking under Type Curve, the next header in that</p> <p>16 column, but stopping before you get to Economics, what</p> <p>17 are those values showing?</p> <p>18 A. These are all input variables to the type</p> <p>19 curve equation.</p> <p>20 Q. And how -- let's -- how did TPH come to decide</p> <p>21 which inputs to use for its type curve analysis?</p> <p>22 A. They are the result of engineering analysis.</p> <p>23 Q. And would that engineering analysis have been</p> <p>24 done specifically in connection for the business</p> <p>25 combination?</p>
<p style="text-align: right;">Page 75</p> <p>1 Q. So TPH created its type curves in connection</p> <p>2 with the business combination independent of what the</p> <p>3 seller's assumptions were?</p> <p>4 A. That's correct.</p> <p>5 Q. So does this reflect that TPH developed six</p> <p>6 distinct type curves in connection with its due</p> <p>7 diligence for the business combination?</p> <p>8 A. This reflects that we used six distinct type</p> <p>9 curves in our economic model. It's possible that we</p> <p>10 developed more and didn't use the others.</p> <p>11 Q. And these type curves that TPH developed</p> <p>12 informed the valuation that TPH prepared in connection</p> <p>13 with the due diligence for the business combination?</p> <p>14 A. That's correct.</p> <p>15 Q. And if you look under (as read) "Well Type</p> <p>16 Assumptions," the column on the left, does the</p> <p>17 categories listed under -- sorry, "Type Well</p> <p>18 Assumptions," if you look at the categories listed under</p> <p>19 that all the way to stopping at Type Curve, do those</p> <p>20 reflect the considerations that TPH gave thought to in</p> <p>21 preparing a type well in connection with the business</p> <p>22 combination?</p> <p>23 A. I think the subtitle, Type Well Assumptions,</p> <p>24 is maybe not the best choice of words. As I look at</p> <p>25 this, some of these are actually outputs of the type</p>	<p style="text-align: right;">Page 77</p> <p>1 A. Yes.</p> <p>2 Q. And would TPH's conclusions about which inputs</p> <p>3 for the type curve to use also have been informed by its</p> <p>4 other experience working for operators in the STACK?</p> <p>5 A. Yes.</p> <p>6 Q. If we could look at Slide 15. It's titled (as</p> <p>7 read): "Comparing Assumptions, Petrophysical Approach</p> <p>8 to Locations Per Section Development."</p> <p>9 A. (Reviewing.)</p> <p>10 Q. And in this context "Locations" mean number of</p> <p>11 drilling locations?</p> <p>12 A. Generally speaking -- not exactly. I believe</p> <p>13 "Locations" is the total number of locations, which</p> <p>14 would be the sum of wells already drilled plus future</p> <p>15 locations to be drilled.</p> <p>16 Q. If you could look under the column labeled</p> <p>17 Methodology, it says (as read): "Locations calculated</p> <p>18 on a section-by-section basis based on OIP and recovery</p> <p>19 factor assumptions."</p> <p>20 Do you see that?</p> <p>21 A. Yes, I do.</p> <p>22 Q. Is that OIP assumptions the calculation that</p> <p>23 we were discussing earlier?</p> <p>24 A. Yes, it is. It's oil in place.</p> <p>25 Q. So the oil in place assumptions here would</p>

<p style="text-align: right;">Page 78</p> <p>1 have been something that TPH created specifically in 2 connection with the due diligence for the business 3 combination? 4 A. TPH created the oil in place assumptions. 5 Q. And what is a recovery factor? 6 A. It's the percent of oil in place that is 7 expected to be produced. So the, you know, definition 8 would be produced oil divided by oil in place. 9 Q. And did TPH utilize more than one recovery 10 factor in connection with its analysis of TPH's acreage 11 in the STACK? 12 A. We looked at a range of reasonable recovery 13 factors. This page reflects a range. Ultimately for 14 our base case we used one -- the same recovery factor 15 for each of the three zones. 16 Q. And is the range of reasonable recovery 17 factors that you referenced the 10 percent to 18 25 percent? 19 A. Yes, that's correct. 20 Q. And how did TPH decide in this instance what 21 would be a reasonable recovery factor to use? 22 A. Yes, that's the result of our geologic and 23 reservoir engineering analysis, both of this specific 24 area and of these specific reservoirs, in addition to 25 all of the experience that TPH has evaluating analogous</p>	<p style="text-align: right;">Page 80</p> <p>1 for other operators in the STACK? 2 A. Yes. 3 Q. But TPH tailored this analysis as needed to 4 fit the particular circumstances of the business 5 combination. Is that right? 6 A. Yes, that's correct. 7 Q. Continuing down the methodology it says (as 8 read): "No locations modeled for sections without: 9 Enough OIP for 2 wells per section at assumed recovery 10 factors." 11 What does that mean? 12 A. If the oil in place was too low for -- so the 13 recovery, if you -- if the oil in place was too low to 14 justify or, based on our calculation, to support two 15 wells, we just assumed it was zero wells to be drilled 16 in that section. 17 Q. And again, the OIP reference here is TPH's 18 analysis of OIP that was created for the business 19 combination? 20 A. Yes, that's correct. 21 Q. And the Other Criteria, it says (as read): 22 "No locations modeled for section without: Depth rights 23 for that respective zone." 24 What is that referring to? 25 A. That refers to we didn't model locations in</p>
<p style="text-align: right;">Page 79</p> <p>1 reservoirs. 2 Q. Based on your experience, do you have a sense 3 of what's a typical recovery factor for operators in the 4 STACK? 5 A. Our experience -- in our experience typical 6 recovery factors would have ranged from approximately 7 10 percent up to potentially as high as 30 percent. 8 Q. And under Methodology it says that (as read): 9 "Locations calculated on a section-by-section basis." 10 So does that reflect that the drilling 11 locations were calculated by TPH for each section within 12 AMH's acreage? 13 A. Yes, that's correct. 14 Q. And before we proceed, this does -- we've been 15 referencing or discussing the content under Methodology. 16 What does this describe as far as 17 methodology? What's the final product of this 18 methodology that's being described here? 19 A. The -- one of the final -- the main product of 20 the methodology described on this page would be the 21 number of locations to be drilled. 22 Q. And this is to be the potential number of 23 locations to be drilled in Alta Mesa Holdings's acreage? 24 A. Yes, that's correct. 25 Q. And had TPH done this type of analysis before</p>	<p style="text-align: right;">Page 81</p> <p>1 areas where AMH did not own the rights to that zone. 2 Q. So this analysis for the number of -- the 3 potential number of drilling locations within AMH's 4 acreage also considered legal constraints on that 5 drilling as far as ownership rights of the right to 6 drill in that depth? 7 A. Yes, that's correct. 8 Q. And under the next bullet under Methodology, 9 it says (as read): "If enough OIP for greater than 10 16 wells per zone per section, wells capped at 16 in 11 that zone in that section." 12 Did I read that correctly? 13 A. Yes. 14 Q. Does this reflect that TPH is considering 15 whether each zone might support over -- strike that. 16 Does this reflect that TPH is considering 17 whether the oil in place in each zone might support 18 greater than 16 wells in that zone? 19 MR. SPARACIO: Object to form. 20 A. This reflects that our geologic analysis 21 suggested there were areas that might support greater 22 than 16 wells per section. 23 However, our engineering analysis -- in 24 doing our engineering analysis, we determined that we 25 would not model anything more than 16 wells per section.</p>

<p style="text-align: right;">Page 82</p> <p>1 Q. (By Mr. Peters) And is that 16 wells -- just</p> <p>2 to make sure I understand, is that 16 up to, but no</p> <p>3 greater than 16 wells per zone per section?</p> <p>4 A. Yes, that's correct.</p> <p>5 Q. And the zones were Osage, Meramec and Oswego?</p> <p>6 A. Yes, that's correct.</p> <p>7 Q. Next criteria is (as read): "No Meramec</p> <p>8 locations modeled at less than 200 feet zone thickness."</p> <p>9 Did I read that correctly?</p> <p>10 A. Yes, that's correct.</p> <p>11 Q. And what is this indicating?</p> <p>12 A. This is in reference to where the geology,</p> <p>13 where the Meramec zone in our analysis -- in our</p> <p>14 determination, the zone was too thin to have locations</p> <p>15 specifically targeting the Meramec.</p> <p>16 Q. So this is another instance where TPH's</p> <p>17 analysis considered the underlying geological thickness</p> <p>18 of the zone?</p> <p>19 A. That's correct. This is an example of how we</p> <p>20 considered the variability or the variation of the</p> <p>21 geology across the Alta Mesa or the AMH position.</p> <p>22 Q. And it also says that "In sections with less</p> <p>23 than 200 feet Meramec thickness, Meramec OIP contributed</p> <p>24 to Osage."</p> <p>25 So is this reflecting that in its</p>	<p style="text-align: right;">Page 84</p> <p>1 locations was the sum of wells that had already been</p> <p>2 drilled plus the number of wells to be drilled. This</p> <p>3 bullet explains that.</p> <p>4 Q. So looking at the Osage column within the</p> <p>5 Slide 15, is this -- does this reflect that the TPH</p> <p>6 predicted that the average number of wells per section</p> <p>7 for a TPH 2.0 type curve well within the Osage and the</p> <p>8 recovery factor of 15 was 7.4?</p> <p>9 A. Yes, that's correct.</p> <p>10 Q. And an average number of wells means some</p> <p>11 sections that have this characteristic would have more</p> <p>12 wells and some would have less. Is that fair?</p> <p>13 A. That's fair.</p> <p>14 Q. And what is the -- could you explain, what</p> <p>15 does the 2,405 total locations under Osage signify?</p> <p>16 A. I believe that is the aggregate total number</p> <p>17 of locations that our model predicted for the Osage. So</p> <p>18 that would be inclusive of wells already drilled, plus</p> <p>19 wells to be drilled.</p> <p>20 Q. And the number of predicted drilling locations</p> <p>21 increased if the recovery factor was higher than 15</p> <p>22 percent. Is that correct?</p> <p>23 A. That is correct.</p> <p>24 Q. And looking under Meramec zone, so sticking</p> <p>25 with the 15 percent as the recovery factor, does this</p>
<p style="text-align: right;">Page 83</p> <p>1 analysis for the potential number of locations within</p> <p>2 AMH's STACK acreage for areas, sections where the</p> <p>3 Meramec was less than 200 feet thick, the oil in place</p> <p>4 within that section was contributed to the Osage zone?</p> <p>5 A. That's correct.</p> <p>6 Q. And in the -- in the STACK, is the Osage</p> <p>7 generally located directly below the Meramec section or</p> <p>8 zone?</p> <p>9 A. I believe that's correct.</p> <p>10 Q. So in this instance where the Meramec zone was</p> <p>11 less than 200 feet thick in a particular section, TPH</p> <p>12 did not treat those zones as distinct. Is that correct?</p> <p>13 A. That is correct.</p> <p>14 Q. And in sections within AMH's acreage where the</p> <p>15 Meramec was greater than 200 feet in thickness, TPH's</p> <p>16 analysis for potential locations treated the Meramec and</p> <p>17 Osage as distinct?</p> <p>18 A. That's correct.</p> <p>19 Q. And the last bullet says: Location -- under</p> <p>20 Methodology, it says (as read): "Location counts shown</p> <p>21 at right include PDP horizontal wells; those locations</p> <p>22 are excluded from modeled undeveloped locations."</p> <p>23 What is that saying?</p> <p>24 A. So PDP stand for proved developed producing.</p> <p>25 That's the producing wells. So my comment earlier about</p>	<p style="text-align: right;">Page 85</p> <p>1 chart reflect that TPH predicted that the Meramec</p> <p>2 section at a 15 percent recovery factor could support,</p> <p>3 on average, 6.4 wells?</p> <p>4 A. I believe that is correct. This is an</p> <p>5 unfortunate situation where converting from a PowerPoint</p> <p>6 file to a PDF file has distorted the data, but I believe</p> <p>7 what you said is correct.</p> <p>8 Q. If you -- I agree with you. And I think if</p> <p>9 you go to the -- for reasons that are unknown to me, if</p> <p>10 you go to the black-and-white version, the Bates-stamped</p> <p>11 version of this presentation of Exhibit 29 -- let's see</p> <p>12 if this gives us some clarity here.</p> <p>13 A. It does.</p> <p>14 Q. Give me clarity.</p> <p>15 So I will reask the question.</p> <p>16 So does this -- under the Meramec, so</p> <p>17 still on Slide 15 of this exhibit, does this reflect</p> <p>18 that for the Meramec and a recovery factor of 15</p> <p>19 percent, TPH predicted that the average number of wells</p> <p>20 per section in that zone would be 6.4?</p> <p>21 A. Yes, that's correct.</p> <p>22 Q. And looking at Oswego at a recovery factor of</p> <p>23 15 percent, does this reflect that TPH predicted that</p> <p>24 the average number of wells per section for that zone</p> <p>25 would be .2?</p>

<p style="text-align: right;">Page 198</p> <p>1 questions for you. We reserve our rights, though.</p> <p>2 Thanks.</p> <p>3 THE WITNESS: Thank you.</p> <p>4 FURTHER EXAMINATION</p> <p>5 BY MR. PETERS:</p> <p>6 Q. This is Matt Peters with defendants. I just</p> <p>7 have a few quick questions for you, Mr. Knupp.</p> <p>8 Did any potential indemnification</p> <p>9 agreement with TPH and as Silver Run II affect in any</p> <p>10 way the analysis that TPH performed in connection with</p> <p>11 the business combination?</p> <p>12 A. No.</p> <p>13 Q. And at the time of TPH's due diligence for the</p> <p>14 business combination in July 2017, do you know whether</p> <p>15 there was consensus among operators in the STACK as to</p> <p>16 how parent-child wells would interact?</p> <p>17 A. My recollection was at that time it was way</p> <p>18 too early and there was not enough data to form a</p> <p>19 consensus as to how parent and child wells would</p> <p>20 interact.</p> <p>21 Q. Thank you.</p> <p>22 MR. PETERS: No more questions from me.</p> <p>23 (Following commenced at 5:03 p.m.)</p> <p>24 THE VIDEOGRAPHER: All parties in</p> <p>25 agreement with going off the record?</p>	<p style="text-align: right;">Page 200</p> <p>1 IN THE UNITED STATES DISTRICT COURT</p> <p>2 FOR THE SOUTHERN DISTRICT OF TEXAS</p> <p>3 HOUSTON DIVISION</p> <p>4 IN RE: ALTA MESA §</p> <p>5 RESOURCES, INC. § CASE NO. 4:19-cv-00957</p> <p>6 SECURITIES LITIGATION §</p> <p>7 REPORTER'S CERTIFICATION TO THE</p> <p>8 VIDEOTAPED / REALTIMED DEPOSITION OF</p> <p>9 JEFFREY P. KNUPP</p> <p>10 JUNE 14, 2023</p> <p>11 (PRESENTED AS 30(B)(6) CORPORATE REPRESENTATIVE</p> <p>12 OF TUDOR PICKERING, HOLT & CO.)</p> <p>13 I, Pat English-Arredondo, CSR, RMR, CRR, CLR,</p> <p>14 Certified Shorthand Reporter in and for the State of</p> <p>15 Texas, hereby certify to the following:</p> <p>16 That the witness, JEFFREY P. KNUPP, was duly sworn</p> <p>17 by the officer and that the transcript of the oral</p> <p>18 deposition is a true record of the testimony given by</p> <p>19 the witness;</p> <p>20 I further certify that pursuant to FRCP Rule</p> <p>21 30(f)(1) that the signature of the deponent:</p> <p>22 ___X___ was requested by the deponent or a party</p> <p>23 before the completion of the deposition and returned</p> <p>24 within 30 days from date of receipt of the transcript.</p> <p>25 If returned, the attached Changes and Signature Page</p> <p>contains any changes and the reasons therefor;</p> <p>_____ was not requested by the deponent or a party</p>
<p style="text-align: right;">Page 199</p> <p>1 MR. PETERS: Yes.</p> <p>2 THE VIDEOGRAPHER: This concludes the</p> <p>3 deposition of Jeffrey Knupp on Wednesday, June 14, 2023.</p> <p>4 We are going off the record at 5:03 p.m.</p> <p>5 (Proceedings concluded at 5:03 p.m.)</p> <p>6 * * *</p> <p>7</p> <p>8</p> <p>9</p> <p>10</p> <p>11</p> <p>12</p> <p>13</p> <p>14</p> <p>15</p> <p>16</p> <p>17</p> <p>18</p> <p>19</p> <p>20</p> <p>21</p> <p>22</p> <p>23</p> <p>24</p> <p>25</p>	<p style="text-align: right;">Page 201</p> <p>1 before the completion of the deposition.</p> <p>2 I further certify that I am neither counsel for,</p> <p>3 related to, nor employed by any of the parties or</p> <p>4 attorneys in the action in which this proceeding was</p> <p>5 taken, and further that I am not financially or</p> <p>6 otherwise interested in the outcome of the action.</p> <p>7 Certified to by me this 19th day of June, 2023.</p> <p>8</p> <p>9</p> <p>10</p> <p>11 <i>Pat English-Arredondo</i></p> <p>12 Pat English-Arredondo,</p> <p>13 CSR (TX), RMR, CRR, CLR</p> <p>14 Texas CSR 3828</p> <p>15 Expiration Date: 4/30/2024</p> <p>16 Independent Contract Reporter for:</p> <p>17 Veritext Legal Solutions</p> <p>18 Certificate No.: 571</p> <p>19 300 Throckmorton, Suite 1600</p> <p>20 Fort Worth, Texas 76102</p> <p>21 817.336.3042</p> <p>22</p> <p>23</p> <p>24</p> <p>25 Job No. 5943865</p>

Deposition Errata Sheet
Jeffrey Knupp
In re Alta Mesa Resources, Inc. Securities Litigation
Case No. 4:19-cv-00957 (S.D. Tex.)

I, JEFFREY KNUPP, do hereby declare that I have read the transcript of my testimony taken under oath on June 14, 2023 and that to the best of my knowledge, said testimony is true and accurate, with the exception of the following changes listed below:

Page	Line(s)	Change		Reason
		From	To	
18	3	I had an MBA from University of Texas	I have an MBA from University of Texas	Clarity
18	15	And when did you start Exxon?	And when did you start at Exxon?	Transcription error
19	16	determining how many wells to drill with	determining how many wells to drill	Clarity
24	4	which is really not technical work	which is arguably not technical work	Transcription error
30	11	So petrophysics analysis	So the petrophysics analysis	Transcription error
34	14	managing director at this time	managing director quite at this time	Transcription error
37	21	of the business combination.	Of the business combination?	Typographical error
38	15-16	information should probably be the VDRs	information that you recall would be in the VDRs	Transcription error
38	16	AFM	KFM	Transcription error
48	19	also	analysis	Transcription error
51	10	would you say, the space	we'll just say, the space	Transcription error

Page	Line(s)	Change		Reason
		From	To	
51	16	SW	S sub W	Transcription error
51	18	SW	S sub W	Transcription error
58	23	the saying	saying the	Transcription error
59	1	properties	porosities	Transcription error
63	6	it's gross thickness for the Osage	is gross thickness for the Osage	Typographical error
65	1	oil and gas production of oil	oil and gas production of a well	Transcription error
67	15	column over, Amberjack 2.0	column over, labeled Amberjack 2.0,	Transcription error
80	17	OIP	OIP	Typographical error
91	21	meaning	mean	Transcription error
95	20	well	as well	Transcription error
98	13	Oswego	Oswego OP	Transcription error
100	6	upside case were likely to occur	upside case were to occur	Clarity
102	12	were – was relevant to the work	were relevant to the work	Clarity
108	3	And what's the name of "completion techniques" in this context?	And what's the meaning of "completion techniques" in this context?	Transcription error

Page	Line(s)	Change		Reason
		From	To	
117	13	April 25, 2007 (sic/2017)	April 25, 2017	Clarity
134	9	And is it in same	And is it the same	Transcription error
135	15	in connection with this combination	in connection with the business combination	Transcription error
148	25	Knapp	Knupp	Transcription error
149	1	Jeff	Jack	Transcription error
149	14	Gibson & Dunn	Gibson Dunn	Clarity
162	20	ACH	Osage	Transcription error
167	1	they would spec	curve they would expect	Transcription error
167	5	this column and row	Bullis-Coleman row	Transcription error
185	4	portions	position	Transcription error
186	9	multiple-well VDR assessment	multiple-well EUR assessment	Transcription error

I declare under penalty of perjury that the foregoing is true and correct.

Date:

7-24-23

Signed:

